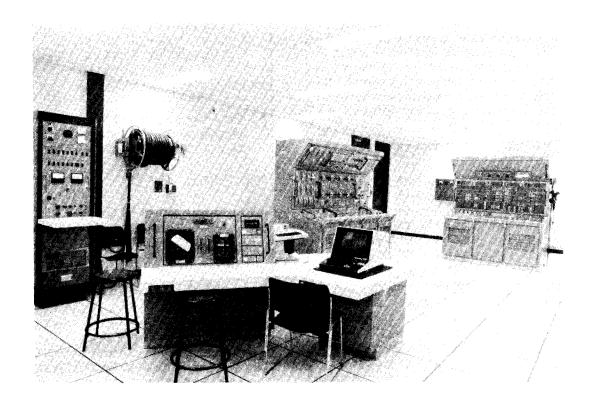
## **SECTION 4**

## DEVICE 20H6 DIRECTORY OF NAVAL TRAINING DEVICES



### FFG-7 PROPULSION ENGINE CONTROL SYSTEM OPERATION TRAINER, DEVICE 20H6

TRAINING CATEGORY:

SURFACE OPERATIONS (SHIP) (Misc)

**ORIGINATING AGENCY:** 

**CNET** 

SECURITY CLASSIFICATION:

Device 20H6 is unclassified.

#### INTENDED USE:

Device 20H6 will provide operating and casualty training for line officers and watch-standing personnel of the engineering spaces on th FFG-7 Perry-class guided missile frigate. It will be used in Propulsion Engineering Schools for hands-on training of officers and enlisted personnel who will operate the FFG-7 class propulsion and machinery systems.

#### **FUNCTIONAL DESCRIPTION:**

The 20H6 Operator Trainer consists of three (3) major subsystems, the trainee stations, the instructor station and the computer subsystem.

The trainee stations consist of the Propulsion Control Console (PCC), Electrical Plant Control Console (EPCC), Auxiliary Control Console (ACC) and the Local Operational Panel (LOP) that are simulated to have front panels which are identical to and contain the same type devices as on the actual panels of the consoles in the FFG-7 type ships. The enclosures of the control consoles contain the power supplies and the logic necessary to provide the interface between the front panel devices and the rest of the trainer.

The instructor station contains the FFG-7 bridge panel functions, the operations panel functions, the CRT display and keyboard functions, and the training problem controls. The logic assemblies and power supplies are of the same type used in the trainee stations.

The computer subsystem is based upon a Digital Equipment Corporation PDP 11/70 computer with disc/controllers, magnetic tape transport and LA-36 printer.

# DEVICE 20H6 DIRECTORY OF NAVAL TRAINING DEVICES

Training problems can begin at any of ten (10) initial conditions elected by the instructor. Machinery casualties can be inserted at will to train for proper procedures. The reset feature allows repetition of problems with minimal training delay. The freeze control permits immediate problem stop to discuss important training situations.

#### PHYSICAL INFORMATION:

Number of Pieces: Eleven (11)

Sizes:

PCC 96" W x 38" D x 84.12" H
EPCC 96"W x 38" D x 84.12" H
ACC 71" W x 41" D x 84.12" H
LOP 96" W x 24" D x 92" H

**Data Logger** 

(DEC LA 36) 27.5" W x 24" D x 33" H Instructor Station 79" W x 53" D x 47" H

Computer Processing Unit

 (PDP 11/70)
 46.5" W x 30" D x 50" H

 Disc Drive
 21" W x 30" D x 72" H

 Magnetic Tape
 21" W x 30" D x 72" H

 Printer Terminal
 27.5" W x 24" D x 33" H

(DEC LA36)

Bus Expansion 21" W x 30" D x 72" H

Cabinet

Weight:

 PCC
 2,800 Lbs.

 EPCC
 3,500 Lbs.

 ACC
 2,425 Lbs.

 LOP
 2,135 Lbs.

 Data Logger
 102 Lbs.

 Instructor Station
 800 Lbs.

**Computer Processing** 

Unit 800 lbs.
Disc Drive 500 Lbs.
Magnetic Tape 500 Lbs.
Printer Terminal 102 Lbs.
Bus Expansion Cabinet 500 Lbs.

TOTAL SYSTEM 14,164 Lbs.

POWER REQUIREMENTS:

120 Volts, 60 Hz., 32.8 KVA

PUBLICATIONS FURNISHED:

 Operations and Maintenance Manual, FFG-7 Propulsion Control Console Operator Trainer Device 20H6, NAVTRADEV P-4471-1 (U).

PERSONNEL:

Instructor: Three (3) Chiefs or 1st Class PO,

currently in GS rates and graduates of an instructor

training course

Trainees: Class - Up to Fifteen (15)

CONTRACT IDENTIFICATION:

Manufactured by General Electric Company, Daytona Beach, FL under NAVTRASYSCEN Contract No. N61339-77-C-0142

LOCAL STOCK NUMBER:

6930-LL-C00-4590